Peptides Sequences, Human, Mouse and Rat

A.

```
                    :   :     **.:

IB2     :   IPSPSVEEPHKHRPTTLRL--TTLGAQDS
IB1     :   PGTGCGDTYRPKRPTTLNLFPQVPRSQDT
c-Jun   :   GAYGYSNPKILKQSMTLNLADPVGNLKPH
ATF2    :   TNEDHLAVHKHKHEMTLKFGPARNDSVIV
```

B.

```
            :   . .***** *     **:

L-IB2   :   EEPHKHRPTTLRL--TTLGAQDS
L-IB1   :   DTYRPKRPTTLNLFPQVPRSQDT
                            °  °
```

C.

```
L-TAT      :   NH2- GRKKRRQRRR  -COOH
L-TAT-IB1  :   NH2- GRKKRRQRRRPPDTYRPKRPTTLNLFPQVPRSQDT  -COOH
L-TAT-IB2  :   NH2- GRKKRRQRRPPEEPHKHRPTTLRLTTLGAQDS  -COOH

D-TAT      :   NH2- RRRQRRKKRG  -COOH
D-TAT-IB1  :   NH2- TDQSRPVQPFLNLTTPRKPRYTDPPRRRQRRKKKRG  -COOH
```

Fig.1

Generic Sequences, Human, Mouse and Rat

L-TAT-IB : NH$_2$- XXXXXXXXRKKRRQRRRXXXXXXXXXXRPTTLXLXXXXXXXQDS/TX -COOH

D-TAT   : NH$_2$- XXXXRRRQRRKKRXXXX -COOH

D-TAT-IB : NH$_2$- XT/SDQXXXXXXXLXLTTPRXXXXXXXXXRRRQRRKKRXXXXXXXX -COOH

Fig.2

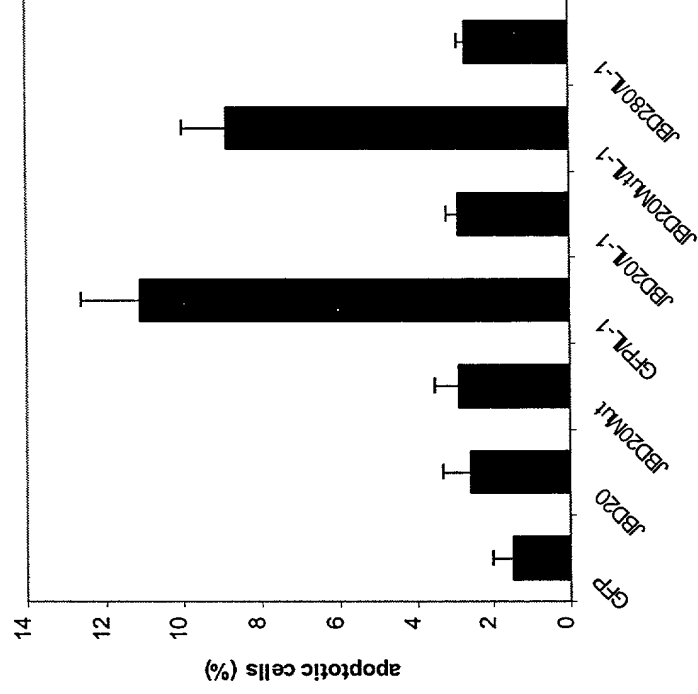Effects of GFP-JBD$_{23}$ Construct on
Pancreatic β-Cell Apoptosis

Fig. 3

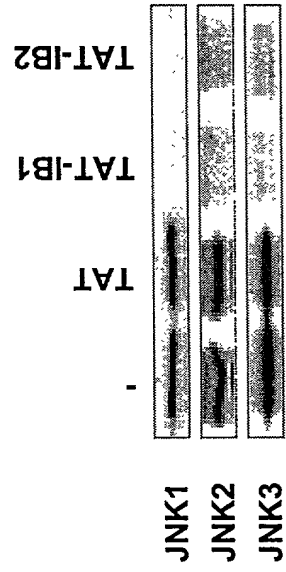Effects of TAT-IB Peptides on JNK Mediated Phosphorylation

Fig. 4a

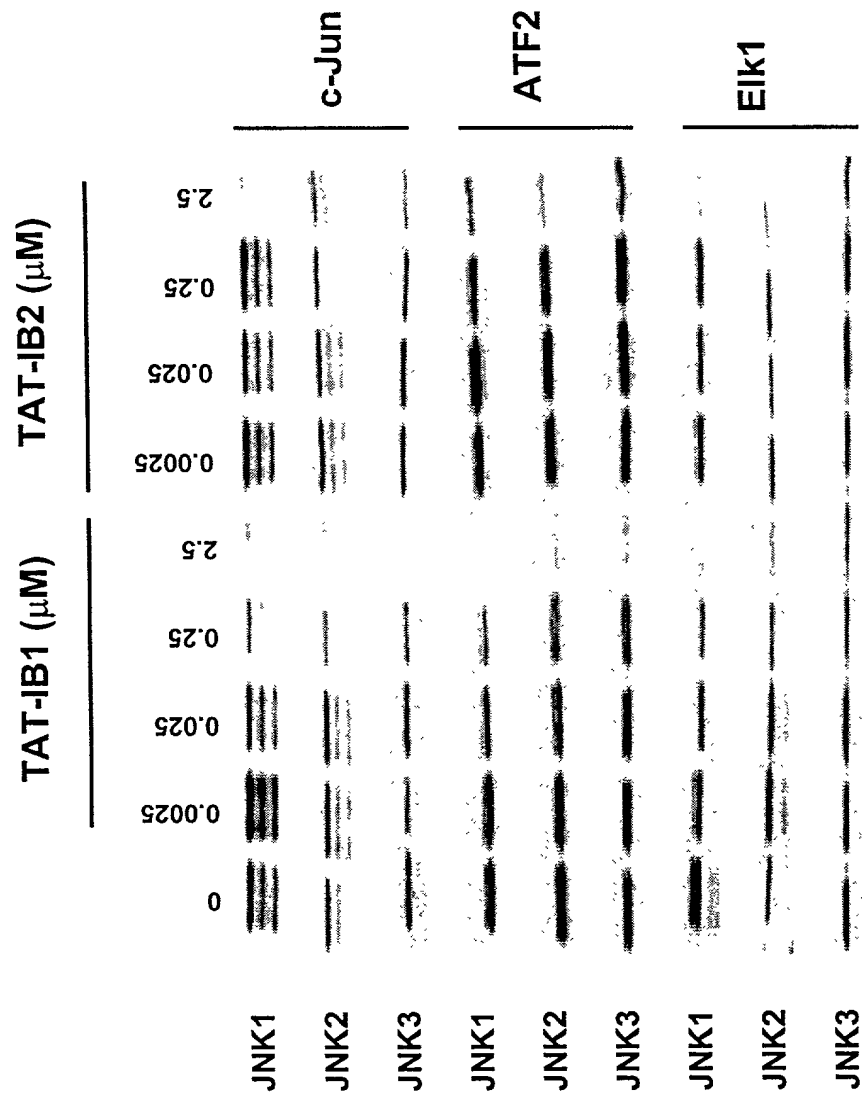# Effects of TAT-IB Peptides on JNK Mediated Phosphorylation
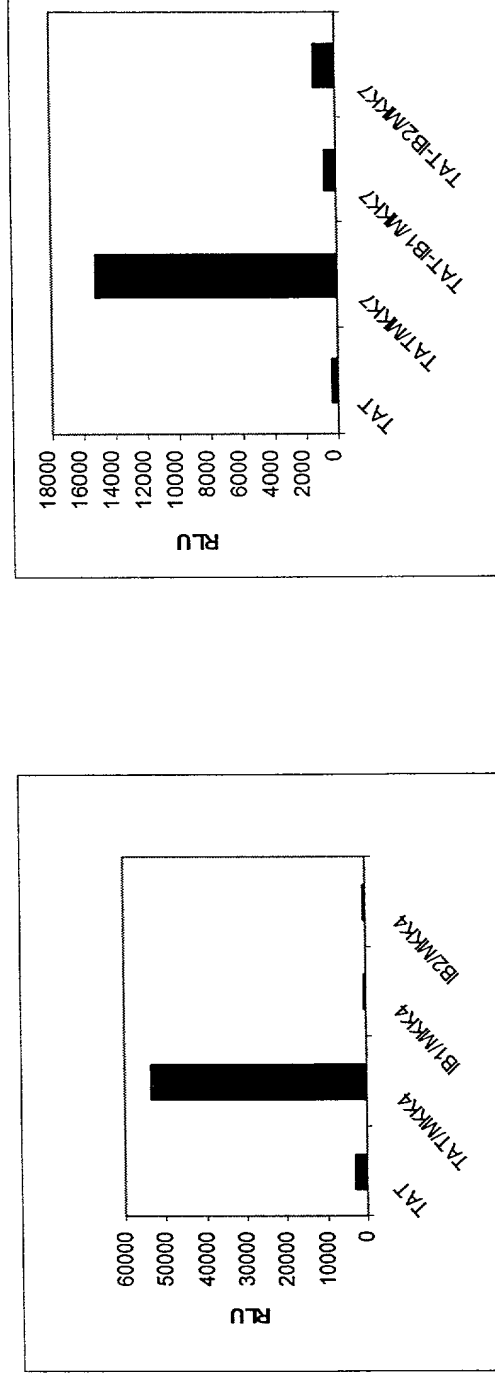
Fig. 4b

L-TAT-IB Inhibition of Phosphorylation By Recombinant JNKs

A.

B.

Fig. 5

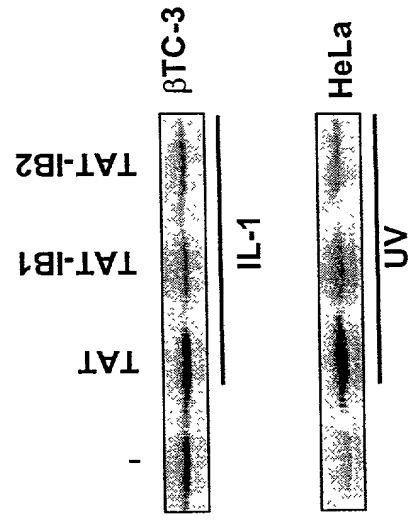# *In Vivo* Inhibition of c-Jun Phosphorylation by TAT-IB Peptides

Fig. 6

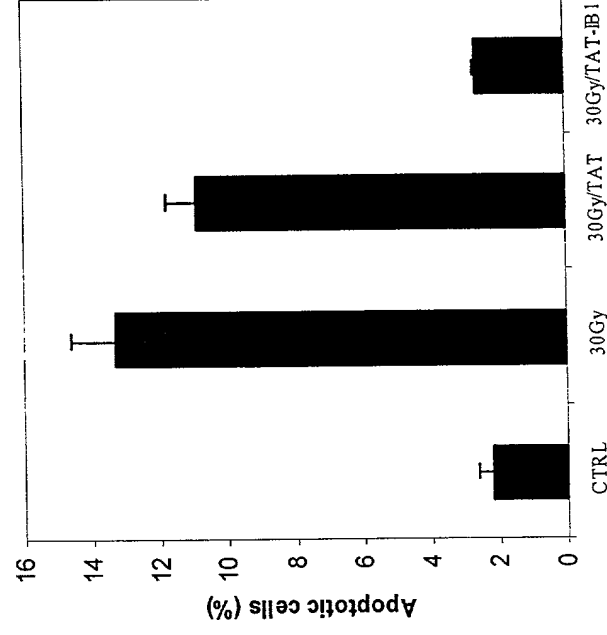Inhibition of IL-1β Induced Pancreatic β-Cell Death
by TAT-IB Peptides

Fig. 7

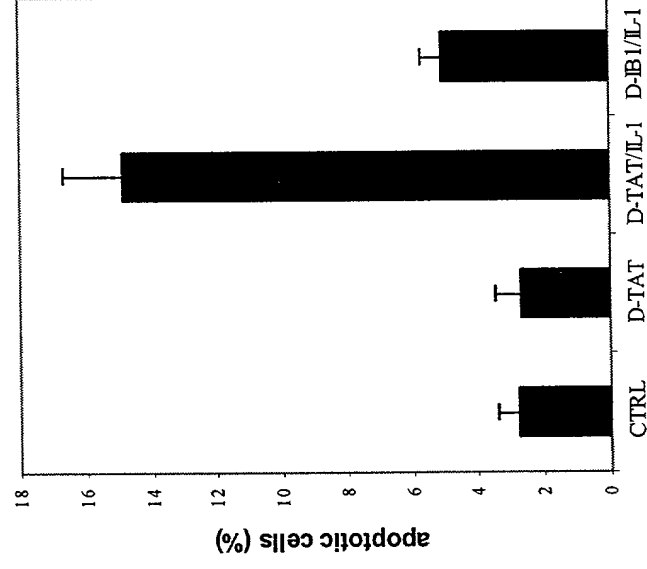The D-TAT-IB1 peptide decreases IL-1-induced
apoptosis in βTC-3 cells

Fig.8

The D-TAT-IB1 peptide confers long-term protection (15 days) against IL-1-induced apoptosis in βTC-3 cells
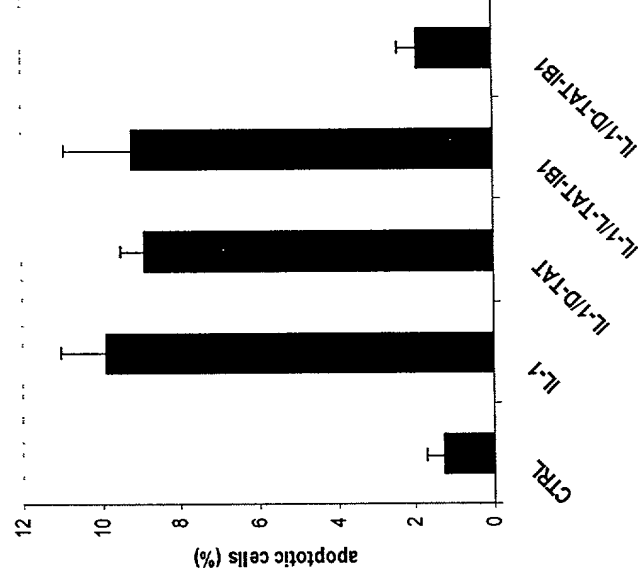

Fig.9

L-TAT-IB1 and D-TAT-IB1 peptides prevent IR-induced apoptosis in a human colon cancer cell line
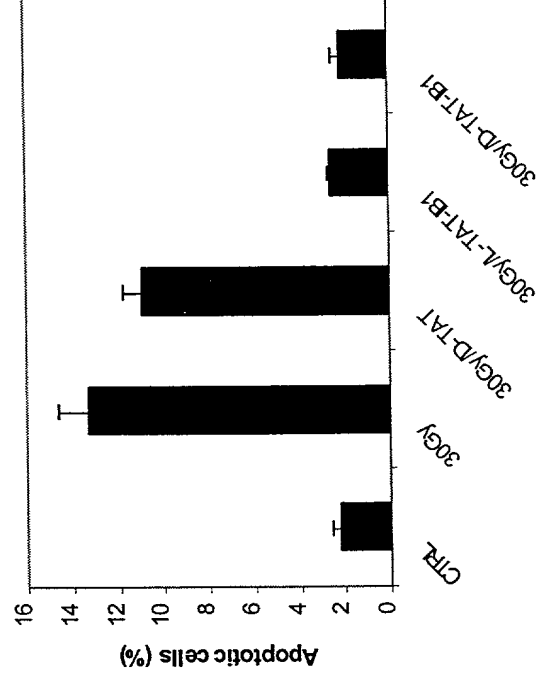

Fig.10

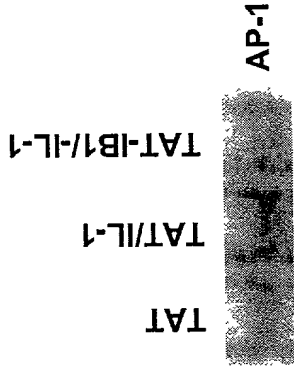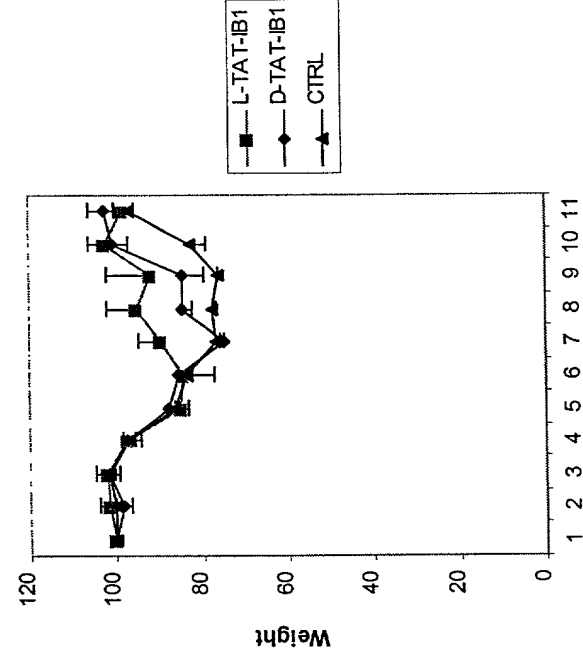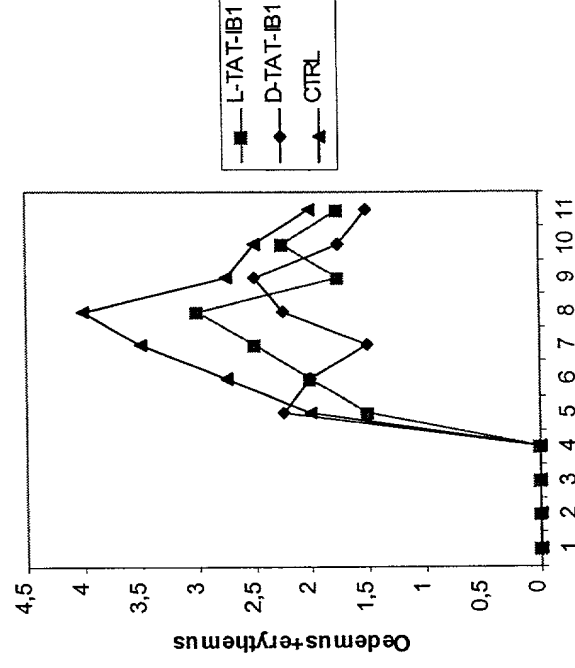## Suppression of JNK Transcription Factor Phosphorylation by L-TAT-IB1 Peptides

TAT   TAT/IL-1   TAT-IB1/-IL-1

AP-1

Fig. 11

Radioprotection to Ionizing Radiation by TAT-IB1 Peptides

Fig. 12